Dimplex
A world of expertise

Installation Instructions

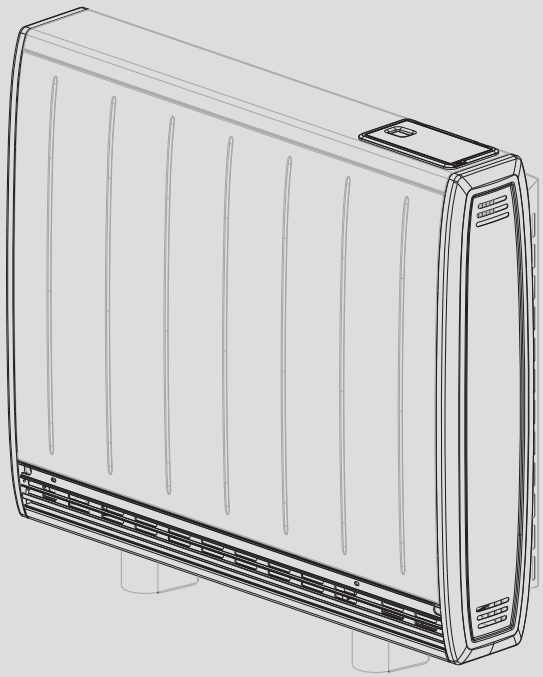
IMPORTANT

These instructions should be read carefully and retained for future use.

Note also the information presented on the appliance.

Quantum Heater

Models:	QM070	QM100	QM125	QM150
Boost Output 230/240V~:	567/630W	792/880W	1017/1130W	1242/1380W
Storage Element Rating 230/240V~:	1435/1560W	2042/2220W	2540/2760W	3024/3300W
Rated Charge Period:	7.7 - 7 Hours			
Energy Cells:	18	24	30	36
Installed Weight:	91kg	115kg	142kg	165kg
kWh:	10.9kWh	15.4kWh	19.3kWh	23.1kWh



IMPORTANT

These instructions should be read carefully and retained for future use.

Note also the information presented on the appliance.

IMPORTANT

WARNING - THE SURFACE OF THIS HEATER CAN BE HOT.

WARNING - THIS APPLIANCE MUST BE EARTHED.

- The installation must be carried out by a suitably qualified individual in accordance with the latest IEE Regulations for electrical equipment.
- For each supply, a means for disconnection must be incorporated in the fixed wiring by a double pole switch with a contact separation of a minimum of 3mm and in accordance with the current IEE Wiring Regulations.
- The heater must not be installed immediately below a fixed socket outlet.
- The supply to the storage elements is **not** suitable for connection to a 30A ring circuit (24 hour peak supply).
- If a supply cord is damaged, it must be replaced by a qualified individual in order to avoid a hazard.
- The surface temperatures of this heater are within the requirements of EN60335-2-61, the European Standard covering the safety requirements for Electric Storage Heaters, and momentary contact with any part of the heater should not cause injury. However, in order to be effective, heaters of any type do get hot, especially around the air outlet grille.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children shall not play with the appliance. Cleaning and user maintenance must not be made by children without supervision.
- Children of less than 3 years should be kept away unless continuously supervised. Children aged from 3 years and less than 8 years can only switch on/off the appliance provided that it has been placed or installed in its intended normal operating position and they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children aged from 3 years and less than 8 years must not plug in, regulate and clean the appliance or perform user maintenance.

  CAUTION — Some parts of this product can become very hot and cause burns. Particular attention has to be given where children and vulnerable people are present.
- If aged or infirm persons, or young children, are likely to be left unsupervised in the vicinity of a heater precautions should be taken to ensure that prolonged contact with the heater cannot occur.

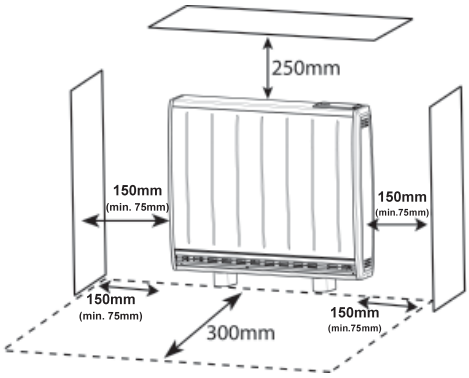
Where particularly vulnerable people are likely to be left unsupervised in the vicinity of the heater we recommend that a guard is fitted around the heater, as is normal with heating appliances in similar circumstances. A range of guards specially designed for Dimplex heaters is available.

If you require further information on these guards, please see contact details on back page **of the Operating Instructions.**

CAUTION: DO NOT COVER SURFACES OF THE HEATER AND DO NOT OBSTRUCT THE AIR OUTLET GRILLE.

- Surfaces of the heater should not be covered or obstructed as this can cause excessive temperatures that can be hazardous and may cause safety cut-outs to operate. This will stop the heater from working.
- Do not put clothes, fabrics or any combustible materials on the heater.
- Do not position the heater where objects can come to within 250mm (10”) of the top or 75mm (3”) of the ends of the heater casing. Do not place objects within 300mm of the front of the heater.
- Curtains must not come to within 75mm (3”) of the top of the heater.
- Do not sit or stand on the heater.
- Do not place objects in contact with the heater.
- To maintain stability, it is essential that the heater is placed on a level surface and care should be taken to avoid irregular surfaces, such as may result from carpets or tiled surrounds partially protruding under the heater.
- Choose appropriate fixings to securely attach the heater to the wall, see section titled ‘Installing the heater’ for detailed information.
- This heater must be installed where it is impossible for its switches and other controls to be touched by a person using a bath or shower.
- IMPORTANT - Due to the newness of materials the heater will produce a smell for the first few days of operation. Rooms must be well ventilated and young children, caged birds, or persons with respiratory complaints must not remain in close proximity to the heater during the first 48 hours of operation.

  PLEASE NOTE: THIS HEATER IS VERY HEAVY AND MUST BE SECURELY FIXED TO A SOUND WALL.
- If, during any reassembly of the heater, a part of the thermal insulation shows damaged or deterioration which may impair safety, it should be replaced with an identical part.
- **UNDER NO CIRCUMSTANCES SHOULD THE WALL FIXINGS BE LOOSENED ON THIS HEATER BEFORE THE BRICKS HAVE BEEN REMOVED FROM ITS CORE.**
- Quantum heaters are not suitable for installation in bathrooms, shower rooms etc. or in areas of high humidity.



Do not place objects within 300mm of the front of the heater and 150mm (min. 75mm) either side.

ATTENTION:
IN ORDER TO AVOID OVERHEATING DO NOT COVER THE HEATER

Preparation

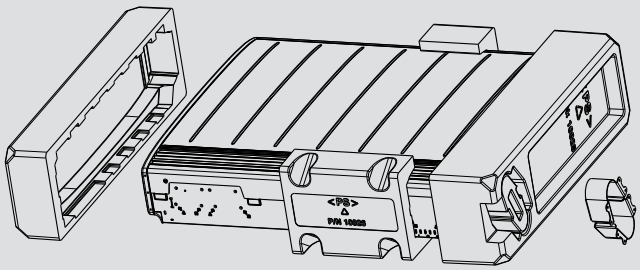


Fig. 1

1. Place the heater flat on the ground with arrows printed on the base of the carton pointing upwards.

Open the carton at the bottom, slide the heater out of the carton by at least 200mm exposing the feet and the fixing kit located within the packaging on the right hand side. Remove the feet and the fixing kit.

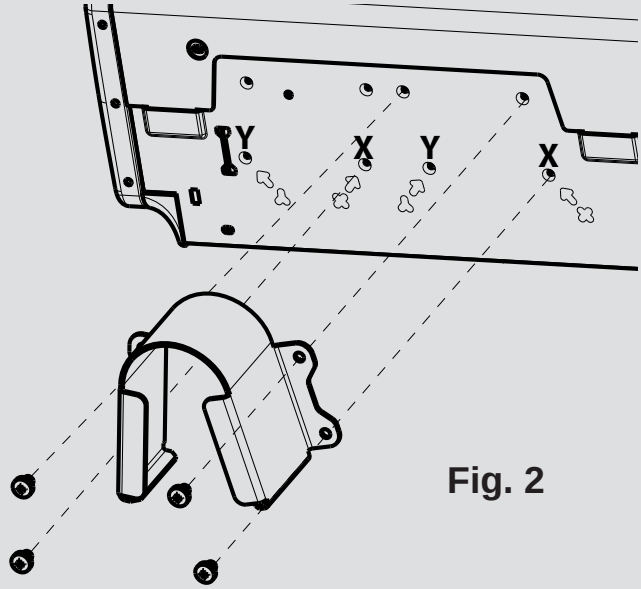


Fig. 2

2. Secure the feet to the heater. For models QM070 and QM100 two locations are possible indicated by **X** and **Y** markings visible on the base of the heater.

Ensure the feet are fixed at the location holes marked with an 'X', see Fig. 2.

However, if this is a replacement heater check the pitch of the feet and choose the appropiate fixing positions - either X or Y.

Note - Foot screws are in the fixing kit.

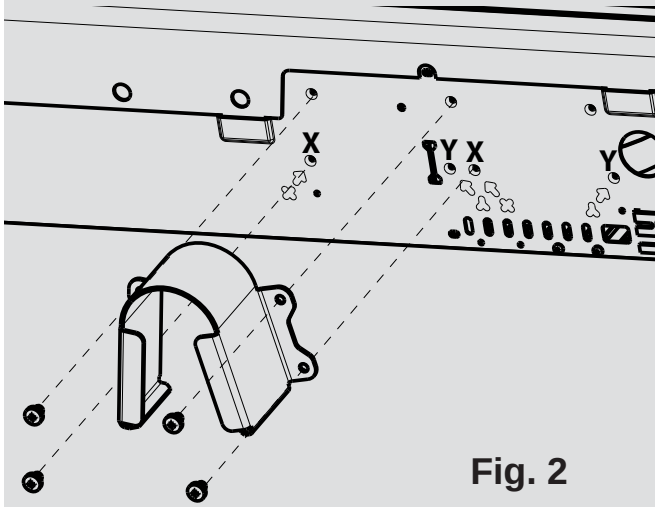


Fig. 2

Stand the heater on its feet before removing the packaging.

Dispose of the packaging in an appropriate way.

Read these instructions carefully before proceeding any further with the installation.

3. Ensure the heater is stable before removing the screws which hold the grille panel in position.
Set the grille to one side.

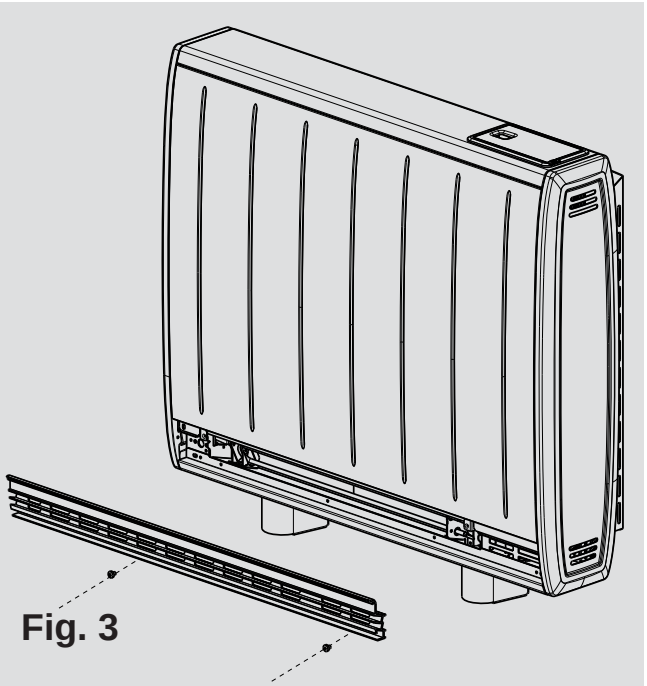


Fig. 3

4. Remove the two screws located towards to bottom of either end of the heater, which retain the heater sides.

Push the left hand and right hand sides vertically upwards to release each side from its securing points.

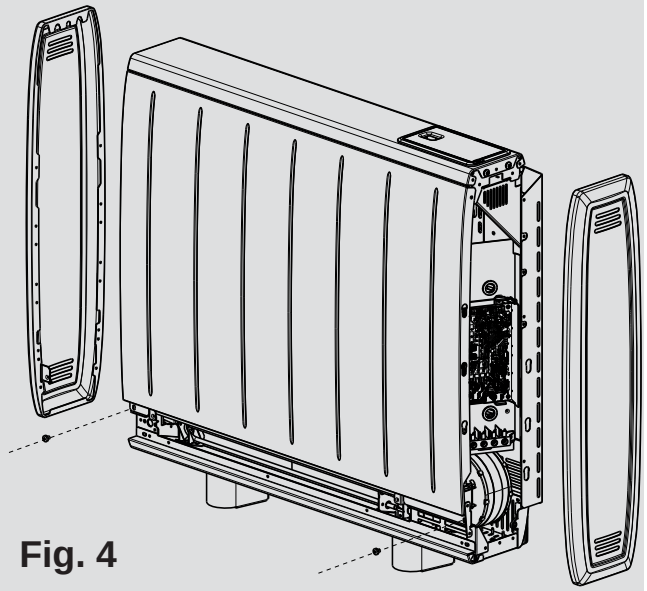


Fig. 4

5. Remove the two screws securing the front panel, located at the upper sides of the heater, and swing the upper edge of the front panel forwards and unhook it from along the heater base.

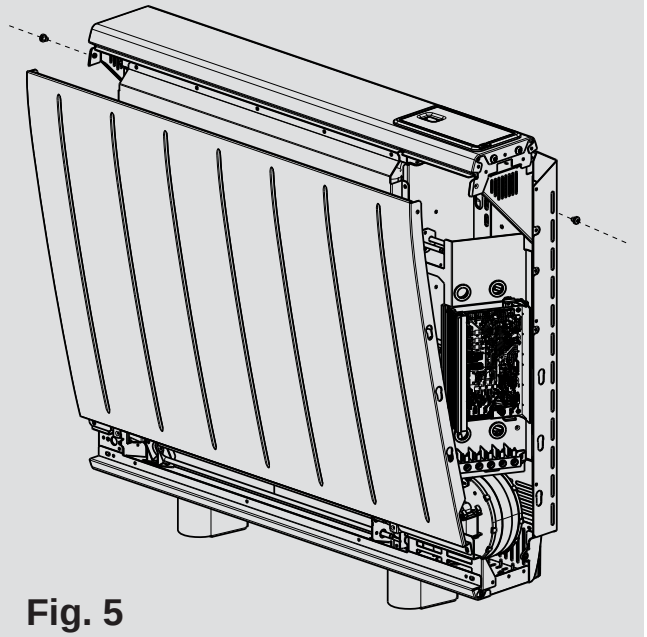


Fig. 5

Installing the Heater

The heater must be securely fixed to a wall. Screws with suitable wall fixings for solid walls are provided. If other walls types are encountered it is the installer who must choose the most suitable fixing.

SUGGESTED FIXINGS

SOLID BRICK/BLOCK: No. 10 size plastic inserts, 8mm drill bit. Drill hole 15mm deeper than plastic insert length.

PLASTERBOARD - If possible locate studding and use No. 10 woodscrews directly into the wood, otherwise M5 rawlplug intersets are suitable.

NOTE: FOR OTHER WALL TYPES (eg. timber frame and hollow concrete) SEEK SPECIALIST ADVICE.

If the floor is carpeted then the carpet should be slit and underlay cut away to allow the feet to rest firmly on the floor. Carpet gripper must be locally removed so that the feet may rest in a level position.

This appliance is heavy. The floor must be checked to ensure that it is capable of bearing the weight of the unit, up to 165kg.

DO NOT UNDER ANY CIRCUMSTANCES ATTEMPT TO MOVE OR REPOSITION THIS HEATER WITHOUT SEEKING EXPERT ADVICE.

6. Place the heater in its final position and mark the fixing holes through the location holes visible through the back of the heater.

Mark the fixing positions at the two extreme ends of the heater with the heater pushed tight against the wall.

Remove the wall bracket from the heater by removing the two screws at each end of the bracket. Place the heater to one side and reposition the bracket against the wall aligning it with the location marks. **It is advisable to use a screwdriver with a magnetic tip as screws dropped may enter the fan housing.**

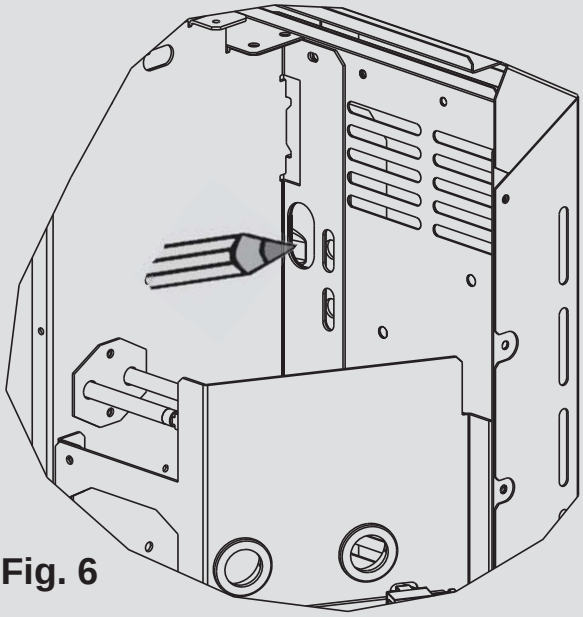


Fig. 6

7. Six fixing positions must be selected for each model. Mark the positions for the fixing holes. Remove the bracket from the wall, drill the holes and fit the wall fixings best suited to the application.

Secure the wall bracket to the wall using **six** screws.

Secure the heater using the appropriate screw fittings.

NOTE: UNDER NO CIRCUMSTANCES SHOULD THESE SCREWS BE REMOVED WITHOUT FIRST REMOVING ALL BRICKS FROM THE HEATER.

QM070

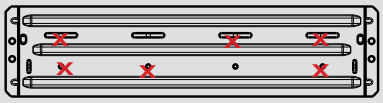
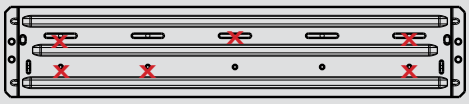
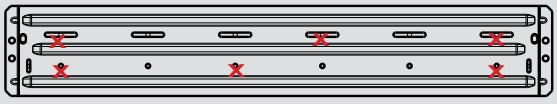


Fig. 7

QM100



QM125



QM150

Warning: Before obtaining access to terminals, all supply circuits must be disconnected.

Two Mains Supplies

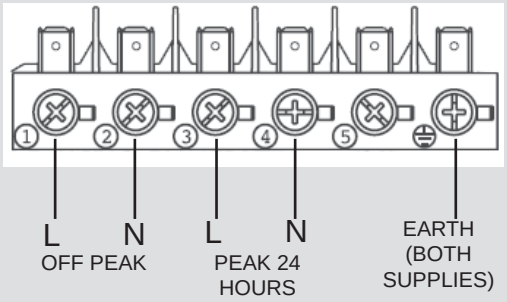


Fig. 8

Electrical Connections

8. The heater leaves the factory configured to operate with two mains supplies, a 24 hour supply and an off peak switched supply.

Storage / Fan circuit

Ensure the brown wire is connected to the terminal marked L.

Ensure the blue wire is connected to the terminal marked N.

The earth wire should be connected to the terminal block marked E or ⏚ .

9. The mains cable entry bushes and terminal blocks will be visible on the right hand side of the unit.

Insert the mains cables through the cable gland at the bottom of the heater in readiness for connection.

IMPORTANT - Only heat resistant ordinary polyvinyl chloride sheathed flexible cord should be used, the following codes apply;

IEC - 60227 IEC57 or
CENELEC - H05V2V2-F

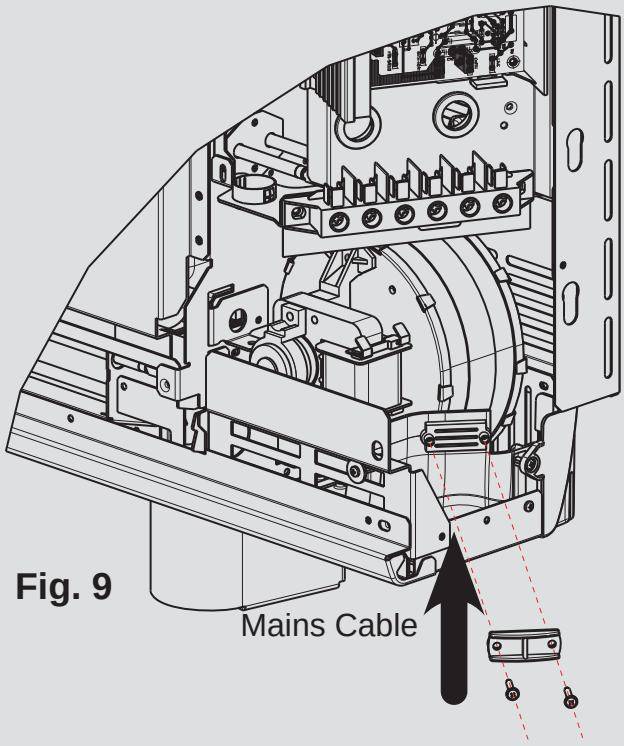


Fig. 9

If the supply cord becomes damaged, it must be replaced by a suitably qualified individual in order to avoid a hazard.

Building the Heater Core

10. Remove the inner front to gain access to the core of the heater.

Lay the inner front carefully to one side to ensure it is not damaged.

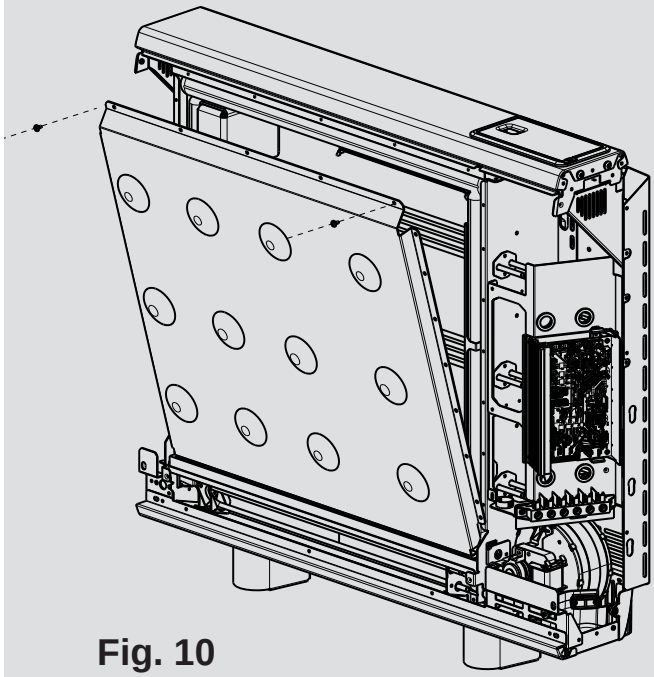


Fig. 10

11. Remove the internal packaging.

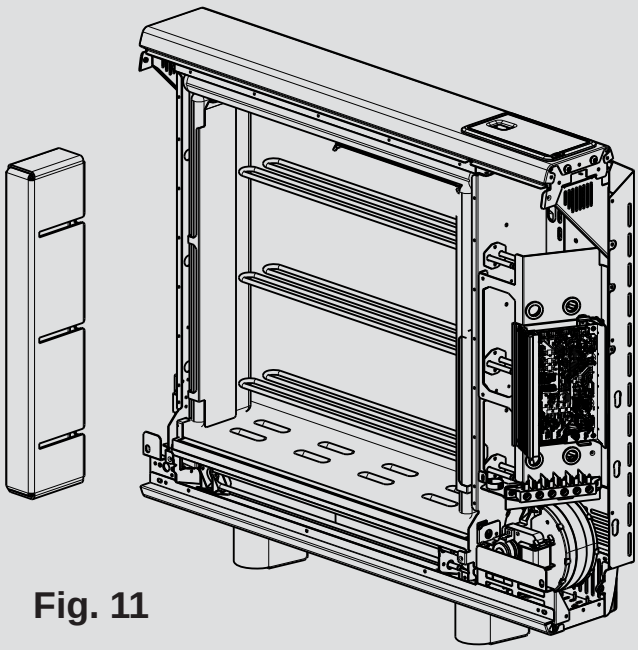


Fig. 11

Bricks

The bricks are supplied separately to the heater in packs of three.

The reference number is 047243.

12. The bricks have several grooves on one surface for locating around the elements. The two slots through the centre of the brick create the air passages within the core.

Position the first brick of the bottom row to the right, firmly pressed against the side insulation with the element grooves facing upwards and fitting neatly around the element. Angle the element upward to fit the brick.

DO NOT DISCONNECT THE ELEMENT TERMINALS

In addition ensure the slots for the air passages line up with the holes in the base insulation.

Fit the remaining bricks to the bottom row, being careful not to damage or dislodge the element.

Note - The bends in the element locate around the grooves in the brick to secure the element.

13. Position the second row of bricks on top of the first but this time the bricks must be upside down ensuring the grooves are positioned over the elements.

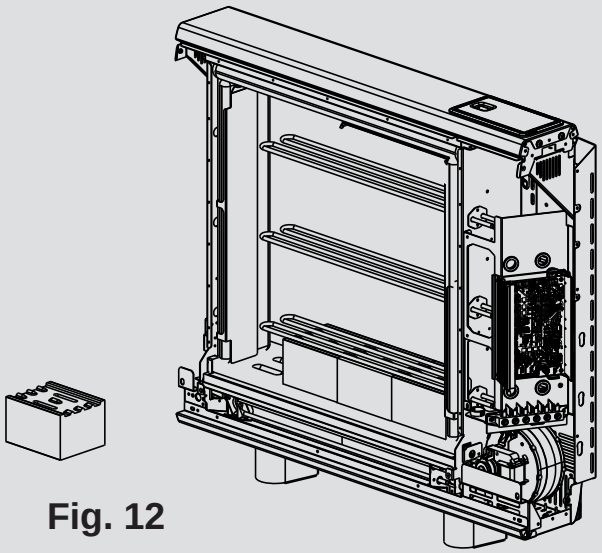


Fig. 12

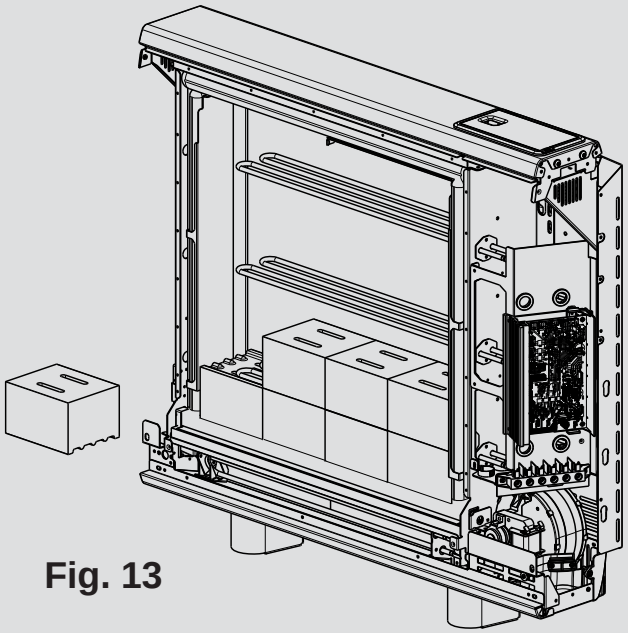


Fig. 13

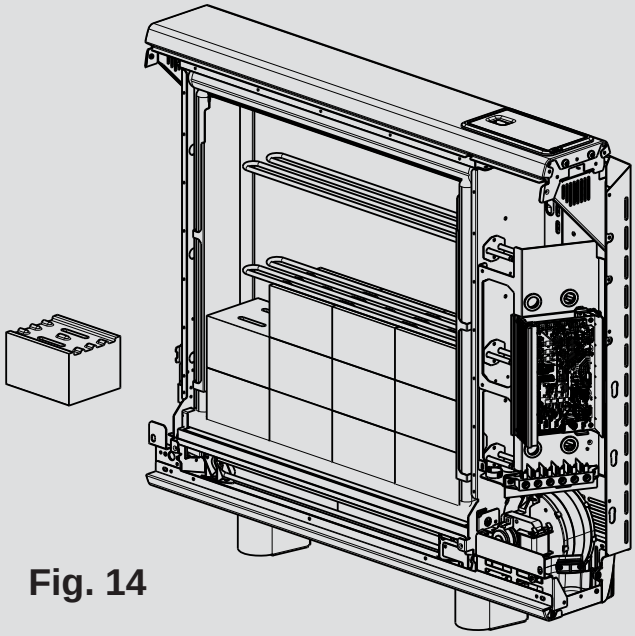


Fig. 14

14. The third row of brick is positioned in a manner similar to the first row. Again be careful not to damage or dislodge the element.

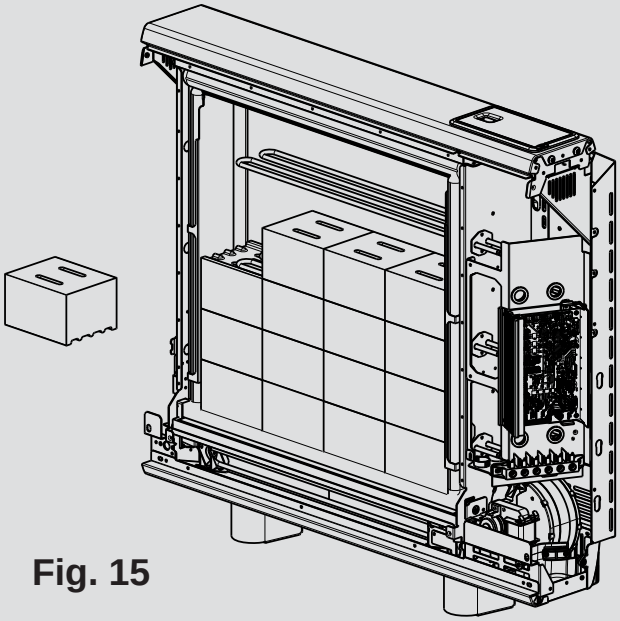


Fig. 15

15. Fit the fourth row of brick above the third row in the upside position.

Repeat for the fifth and sixth rows of brick built around the third element to complete the core build.

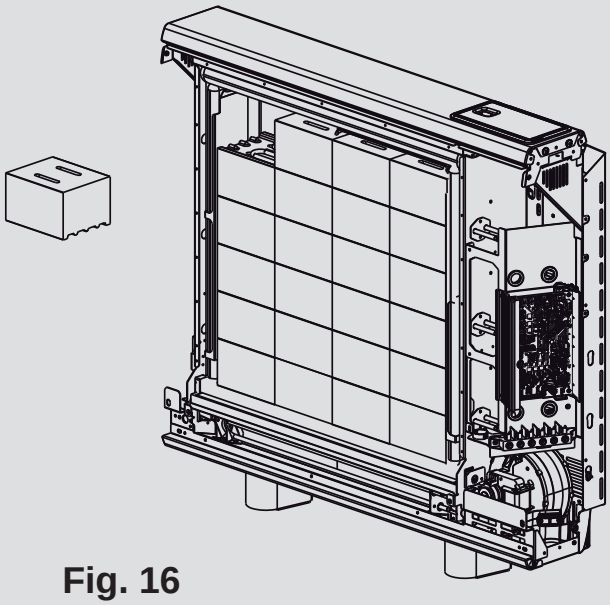


Fig. 16

16. Remember the top row of brick must be fitted upside down.

Check that all the bricks are secure and evenly located.

17. Close the core by refitting the inner front panel complete with insulation.

Ensure the bottom edge is located inside the chassis and that the screws are tightly secured down each edge.

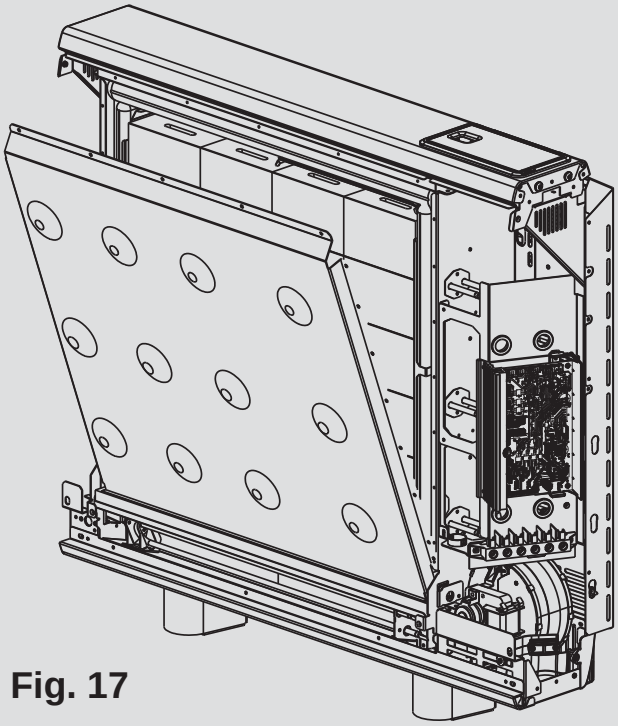


Fig. 17

IMPORTANT

Double check all mains connections are secure and excess cable is restrained and not in contact with any of the heater casing.

ON NO ACCOUNT SHOULD ANY SURPLUS CABLE BE PUSHED INSIDE OR BEHIND THE HEATER.

Once installed DO NOT attempt to reposition the heater without first unloading the bricks.

Reassembly

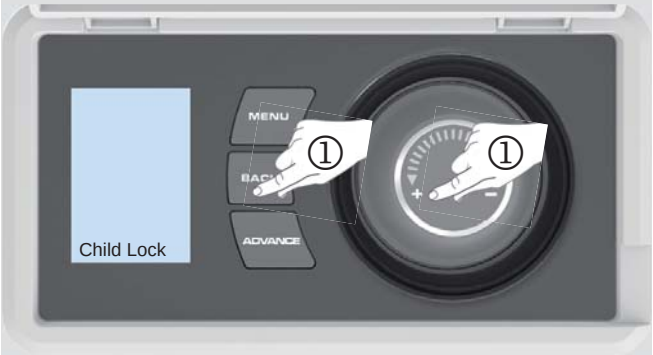
To replace all the panels of the outer casing reverse steps 3 - 5 of these instructions under the section headed **Preparation**.

Ensure all fixings are secure.

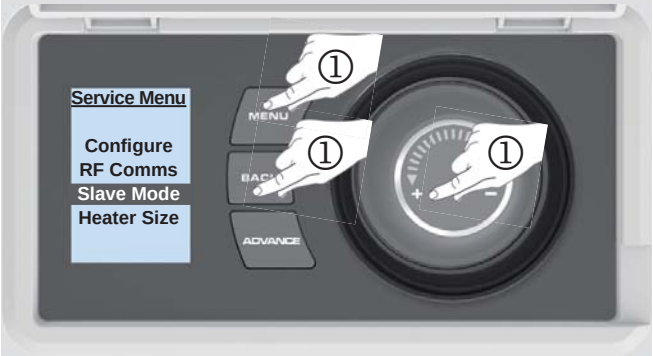
IMPORTANT

During the initial operation some odour may be noticed due to the newness of materials used in manufacture. This is normal and will disappear after a short period of use. It is however advisable to keep the room well ventilated.

Clean the outlet grille and adjacent surfaces after the first operation as some dust may be produced when the heater is first used.



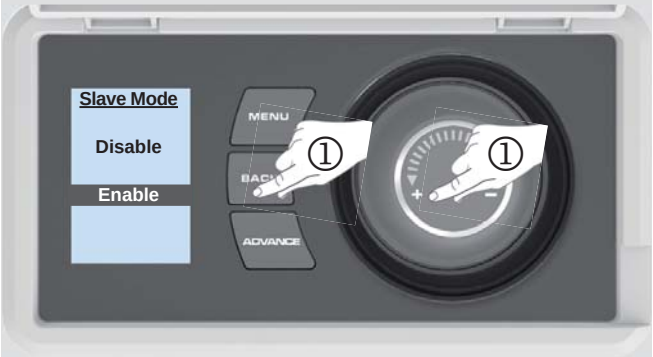
In cases where unauthorised persons may tamper with the control settings it is possible to set a tamper-proof feature at the time of installation, by pressing and holding the **Back** button and the **Selector Dial** simultaneously for three seconds, '**Child Lock**' will apprear on the screen, repeat to reverse. See the Operating Instructions for further details.



Slave Mode

If more than one heater is installed in the same room it is recommended that the smallest capacity heater is set as a slave.

Press **Menu**, **Back** and **Selector Dial** for 3 seconds to enter the service menu, select **'Slave Mode'** and press **Selector Dial**. Select **'Enable'**.



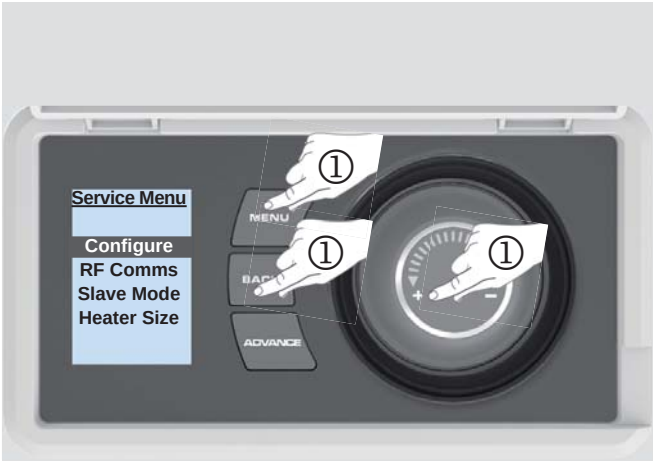
Auto Boost

The boost element can be enabled to automatically be energised during the comfort period by selecting '**Auto Boost**'.

Factory Setting Auto Boost is disabled

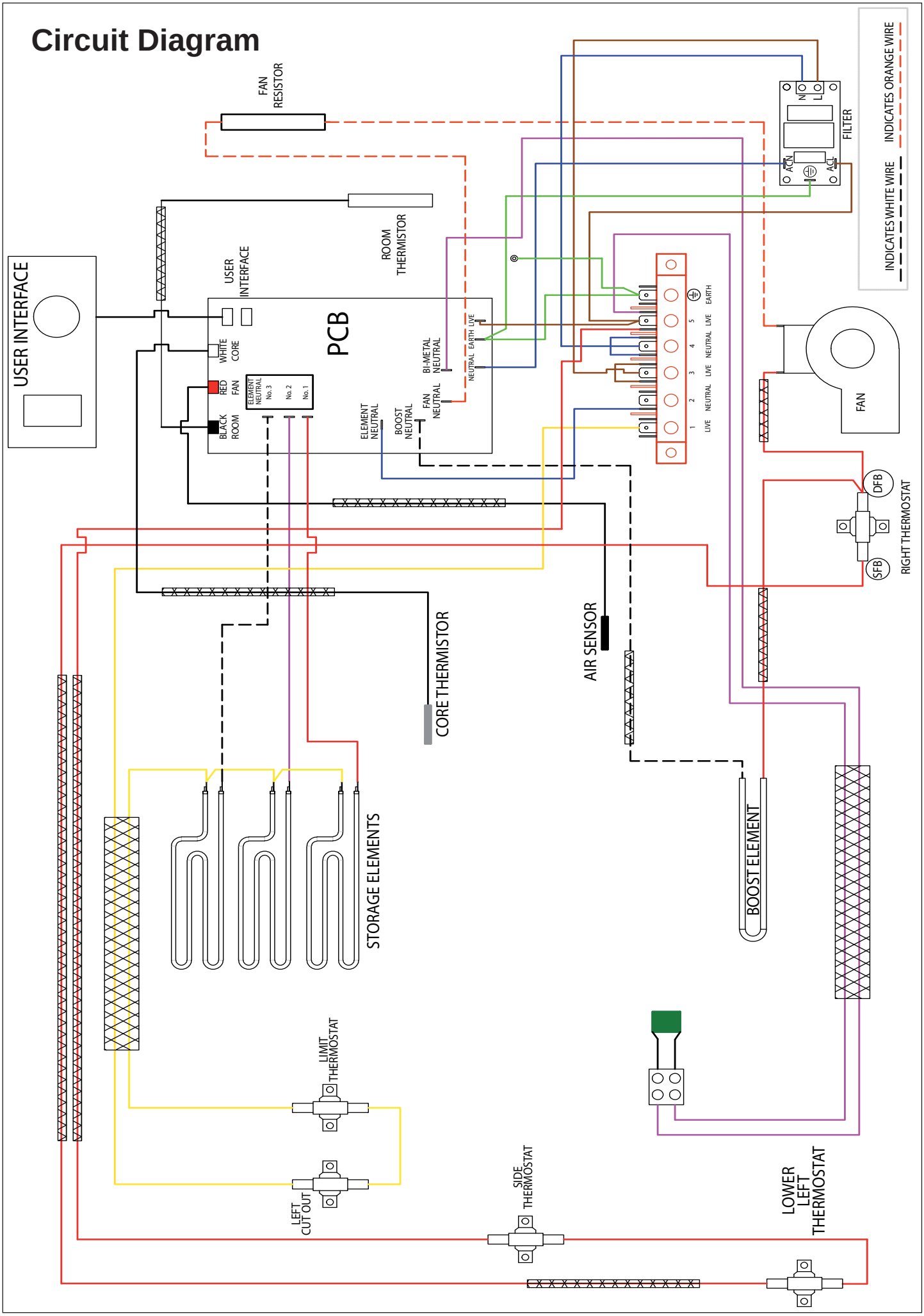
Note: Boost element will only activate if the level of stored energy is less than 50%.

Warning: Depending on the electricity tariff the boost element can be running on day time (peak) rate electricity which could lead to higher running costs.



Press **Menu**, **Back** and **Selector Dial** for 3 seconds to enter the Service Menu. Choose '**Configure**', select '**Auto Boost**' and either turn on or off by selecting and pressing the **Selector Dial**.

Information

For cleaning, heater guards or other sales service and Dimplex contact details please refer to the Operating Instructions.

Circuit Diagram